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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,927	06/23/2003	Yasuhito Miyata	78731	8015

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EXAMINER

ROSENBERG, LAURA B

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,927

Applicant(s)

MIYATA, YASUHIITO

Examiner

Laura B. Rosenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/21/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the amendment filed on 11 April 2005, in which claims 1-3, 5, 7, 9, 13, 17, and 19 were amended and claim 4 was cancelled.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3 and 5-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 1, it is unclear how the retainer for the airbag is mounted to a "lower portion" of the motorcycle. Since the applicant has not claimed what this lower portion is with respect to, the examiner assumes that dividing the motorcycle in half in a horizontal direction will produce a "lower portion" below the division line. According to this assumption, the retainer is not below the division line, and thus is not mounted to a "lower portion" of the motorcycle.

Further, in regards to claim 1, the phrase "inflation control means spaced upwardly from the retainer" is unclear because the inflation control means (tether) is housed within the retainer when the airbag is folded and is only spaced upwardly from the retainer when the airbag has been inflated.

In regards to claim 13, the phrase "a plurality of connections... spaced from the retainer" is unclear because the plurality of connections are housed within the retainer

when the airbag is folded and are only spaced from the retainer when the airbag has been inflated.

In regards to claim 19, the phrase "connecting at least one direction control member...spaced from the retainer" is unclear because the direction control member is housed within the retainer when the airbag is folded and is only spaced from the retainer when the airbag has been inflated.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 5-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosono et al. (6,007,090) in view of Nagata et al. (5,945,184). Hosono et al. disclose an airbag apparatus (#M) for a motorcycle (best seen in figure 1) having front (#Wf) and rear (#Wr) wheels and a seat (#5) for a rider (#R) spaced rearward of the front wheel, the airbag apparatus able to protect the rider in the event of frontal collisions (best seen in figure 7), the airbag apparatus comprising:

- Retainer (including #10, 12, 15) for the airbag, the retainer being mounted to a "lower portion" of the motorcycle (to the same extent as the applicant's claimed invention)

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- Airbag (including #14) able to be deployed from the retainer in a primarily upward, vertical direction forwardly of the seat (best seen in figures 7, 8)
- Airbag having a predetermined inflated volume (best seen in figure 7)
- Inflator (#16) sized to inflate the predetermined airbag volume (best seen in figure 8)
- Inflated airbag has a rear (right side) that is adjacent the rider and a front (left side) that is spaced forwardly therefrom (best seen in figure 7)
- Airbag stowed in the retainer (best seen in figure 3), the retainer positioned to allow the airbag to inflate upwardly, forwardly, and rearwardly (best seen in figures 7, 8)

Hosono et al. do not disclose inflation control means, or a direction control member, for restricting inflation of the airbag.

Nagata et al. teach an airbag apparatus (#6) for a vehicle having front (not shown) and rear (not shown) wheels and a seat (passenger's seat) for a rider (occupant not shown) spaced rearward of the front wheel (occupant located in between seat and front wheel), the airbag apparatus able to protect the rider in the event of frontal collisions, the airbag apparatus comprising:

- Retainer (including #7, 9) for the airbag
- Airbag (including #11) able to be deployed from the retainer in a primarily upward, vertical direction forwardly of the seat (best seen in figures 1, 5)
- Inflation control means/direction control member (including #19) spaced upwardly from the retainer (best seen in figures 1, 5) and able to restrict inflation of the airbag in a predetermined direction (front to rear direction) that is generally aligned with the rider movement due to frontal collisions, and allowing inflation of the airbag in the

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upward vertical direction transverse to the direction aligned with rider movement
(best seen in figure 1, 5)

- Inflation control means comprising tethering means (including #19) able to connect generally opposing portions (at sewn locations #21) of the airbag (best seen in figures 1, 5)
- Inflation control means comprising at least one tether (including #19) connected to the airbag at an inflated airbag portion adjacent to the rider (at #19b) and generally extends away from the rider in the direction aligned with rider movement (best seen in figures 1,5 as it extends in a fore and aft direction as airbag is deployed)
- Airbag having a predetermined inflated volume (best seen in figures 1, 4a, 5)
- Inflator (#8) sized to inflate the predetermined airbag volume with the inflation control means, optimizing the inflated airbag volume extending in the upward direction and able to maximize rider protection while keeping the size of the inflator to a minimum (best seen in figures 1, 5)
- Airbag comprises a central panel (including #14, 15, 18) and side panels (including #16, 17), the inflation control means comprising connectors (including #19a, 19b) attached to the central panel at one end and to the central panel at the opposite end (best seen in figures 1, 5; connectors located in a generally upper position)
- Inflation control means increases rigidity of the airbag in the direction aligned with rider movement over rigidity of the airbag in the upward direction (best seen in figures 1, 5)

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- Recess (not labeled, but located near #19b) formed in the airbag adjacent the rider (best seen in figures 1, 4a, 5)
- In the event that a plurality of tethers are used (column 5), there would be a plurality of connections on forward and rearward sides of the airbag, including a generally upper connection beyond which the airbag extends when inflated (best seen in figures 1, 4a, 5)
- Inflated airbag has a rear (right side) that is adjacent the rider and a front (left side) that is spaced forwardly therefrom, the plurality of connections (including #19a, 19b) generally disposed at the front and rear of the airbag and able to restrict size of the inflated airbag therebetween (best seen in figures 1, 4a, 5)
- Airbag stowed in the retainer (best seen in figure 3), the retainer positioned to allow the airbag to inflate upwardly, forwardly, and rearwardly (best seen in figures 1, 5), and predetermined positions of connections (including #19a, 19b) between the control member (including #19) and the airbag (including #11) cause a predetermined, primary inflation direction to be in a generally upward direction so that size of the inflated airbag is maximized in the upward direction and restricted in a forward and rearward direction (best seen in figures 1, 5)
- Control member (including #19) is not connected to the retainer (including #7, 9) with the airbag inflated (best seen in figures 1, 5)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the airbag apparatus of Hosono et al. such that it comprised inflation control means, or direction control member, as claimed in view of the teachings

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of Nagata et al. so as to avoid wrinkling of the side walls of the airbag during the folding process and to allow for a compactly folded airbag while providing a rapidly inflating airbag that reduces the instantaneous moving speeds of the parts of the airbag up to the completion of inflation (Nagata et al.: columns 1, 4)

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawashima et al., Ellerbrok et al., Barnes, Schneider et al., Abe, and Amamori each disclose an airbag apparatus comprising an airbag, inflator, and inflation control means extending from a generally front to rear direction of the inflated airbag.

Cuevas and Igawa each disclose an airbag apparatus comprising an airbag with a central panel and two side panels, inflator, and inflation control means extending from a generally front to rear direction of the inflated airbag.

Iijima et al. disclose an airbag apparatus for a motorcycle.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


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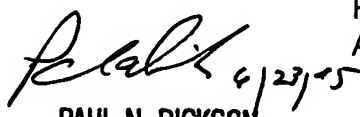
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura B Rosenberg
Patent Examiner
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